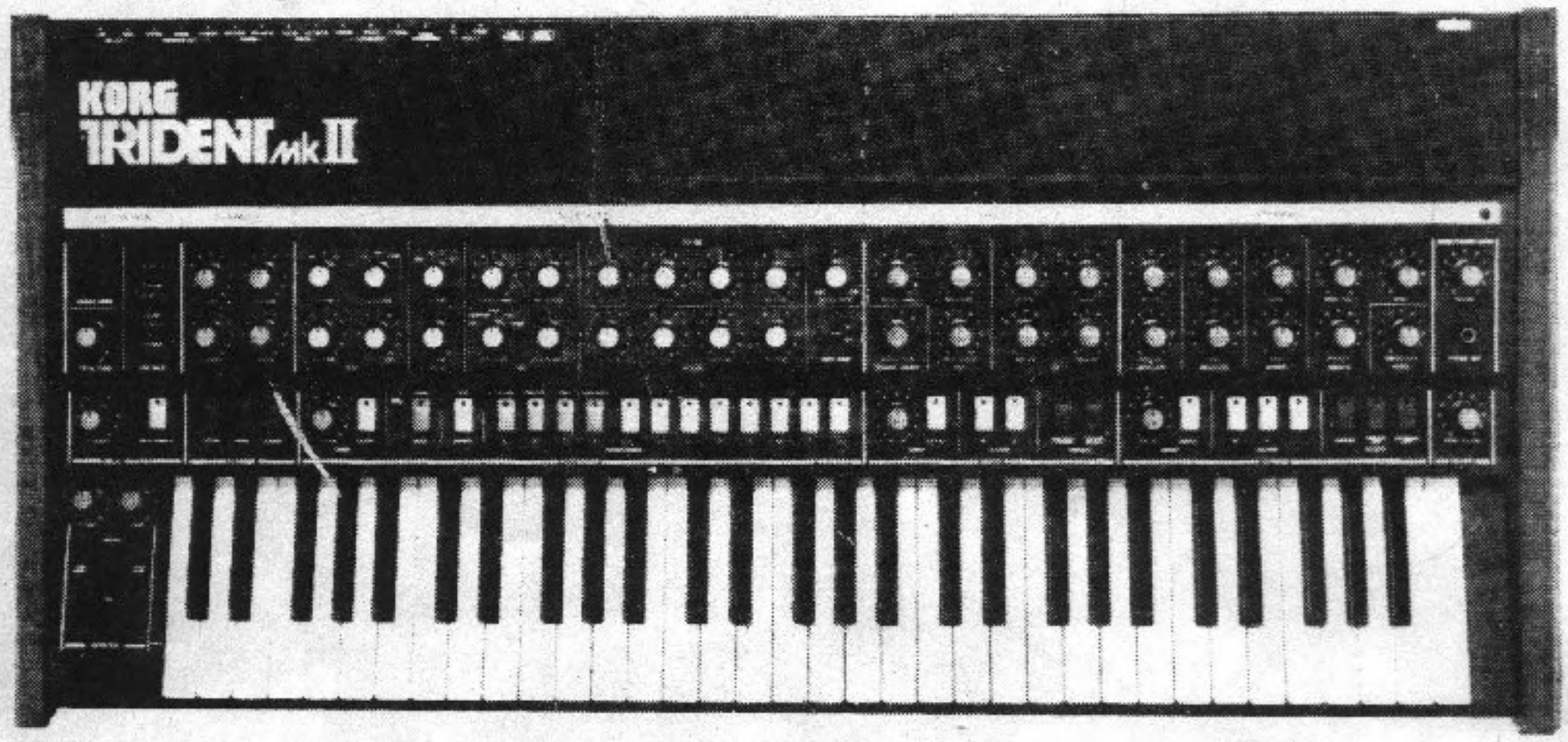
KORG

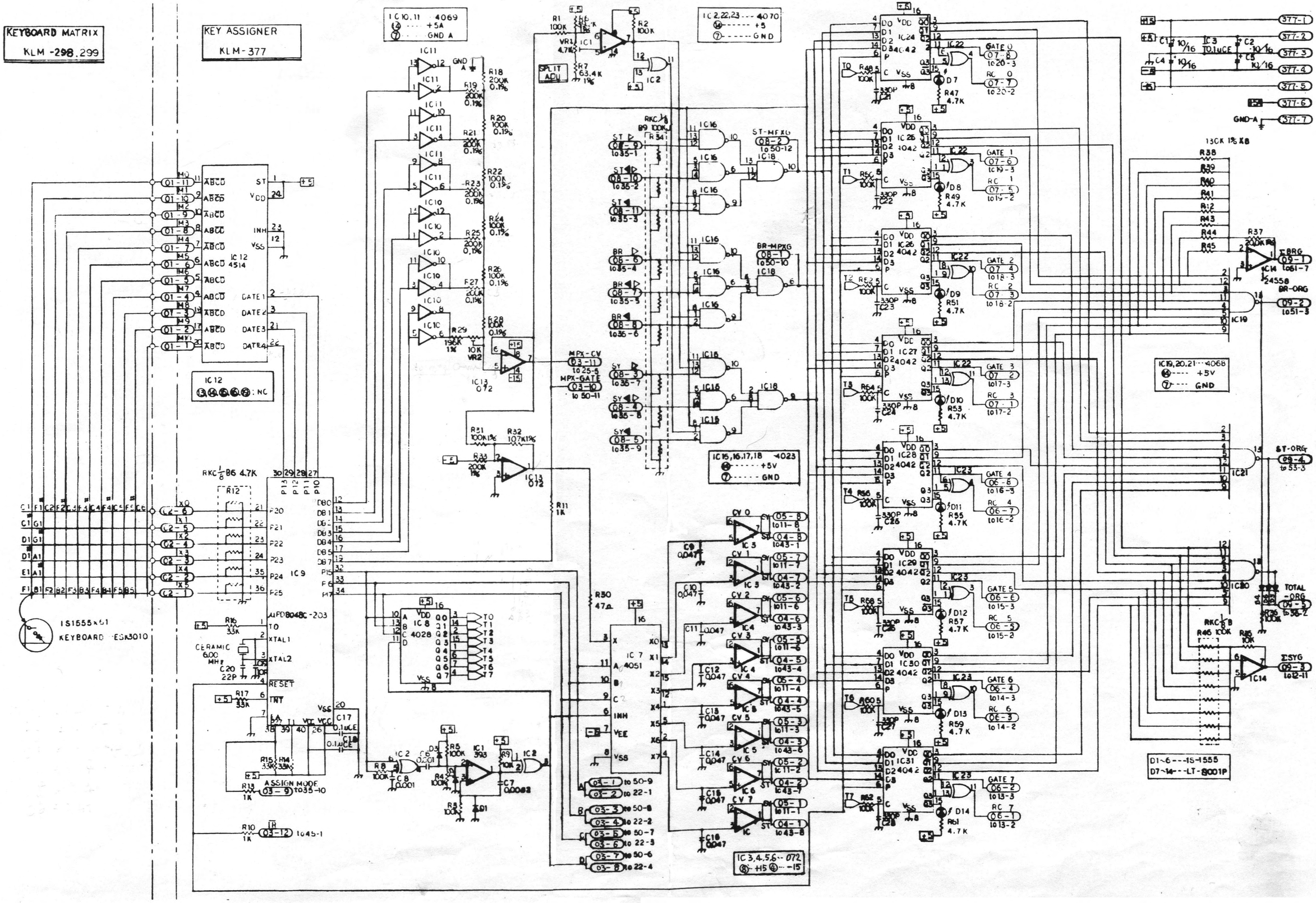


PERFORMING KEYBOARD
SERVICE MANUAL TRIDENT mk II

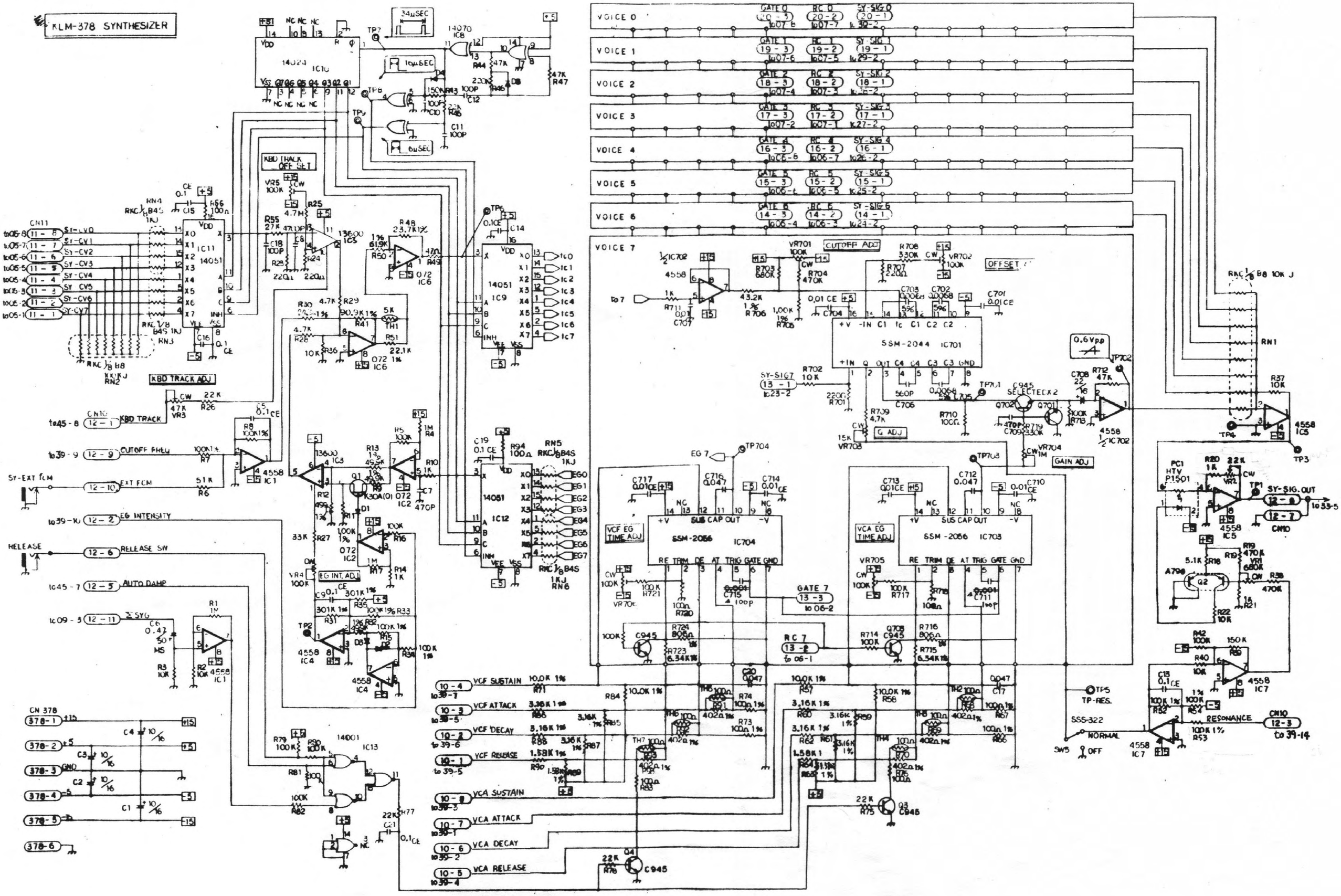
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KLM-298, 299, 377

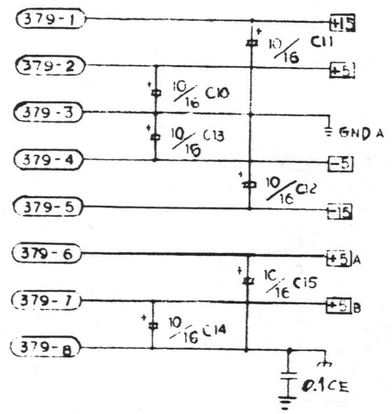


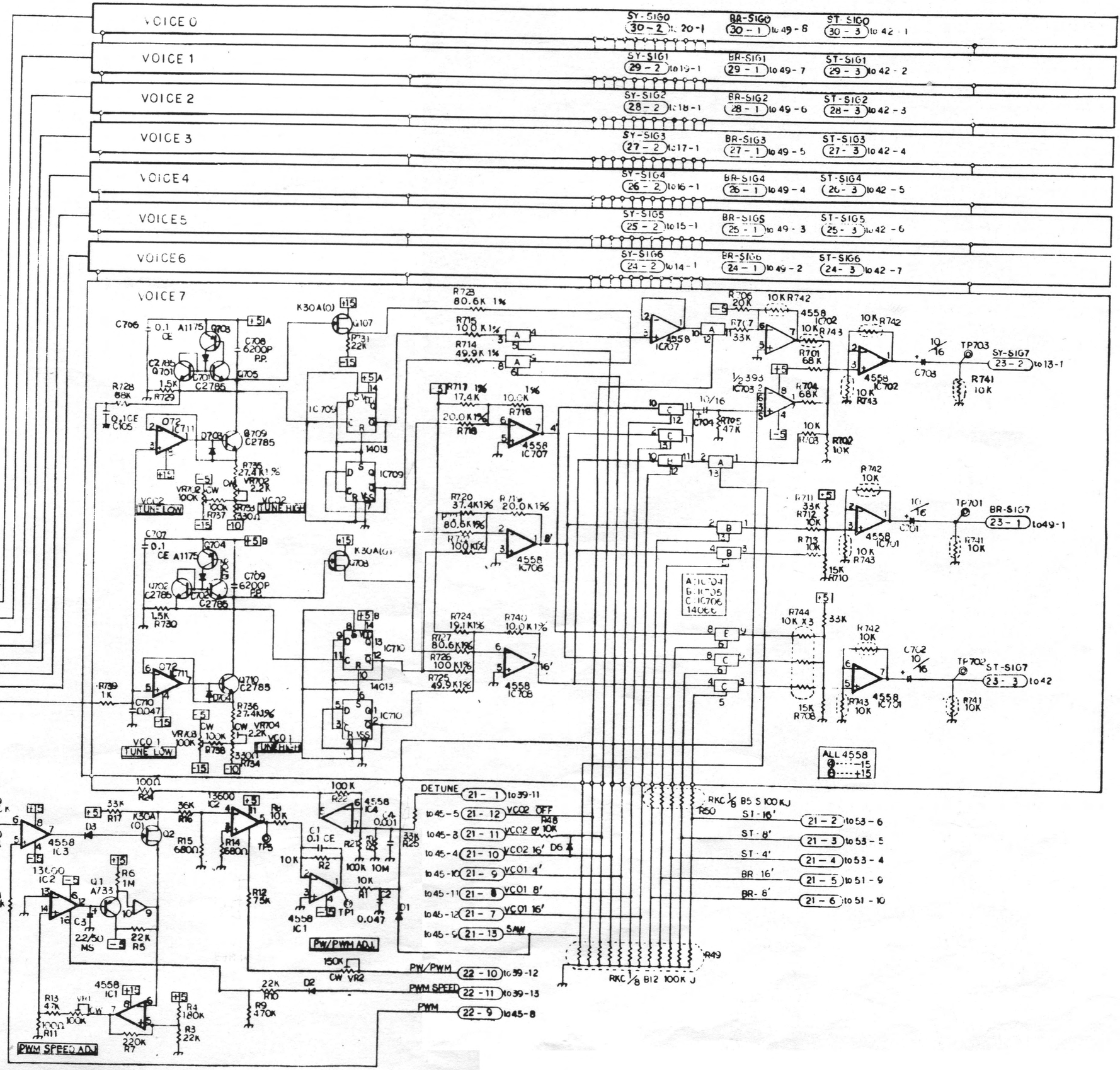
KLM-378 SYNTHESIZER



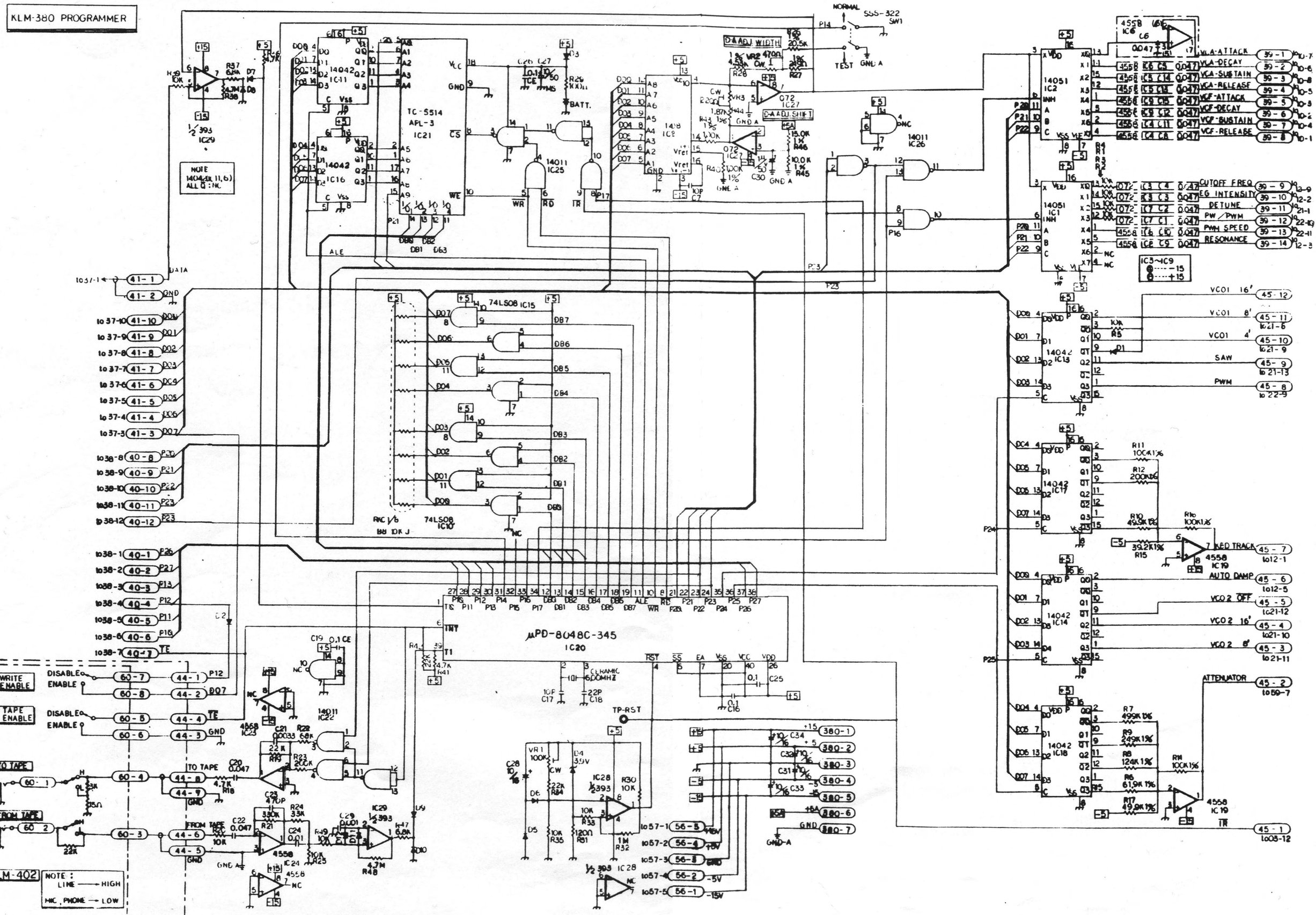
KLM-379 SIGNAL GENERATOR

KLM-379 SIGNAL GENERATOR

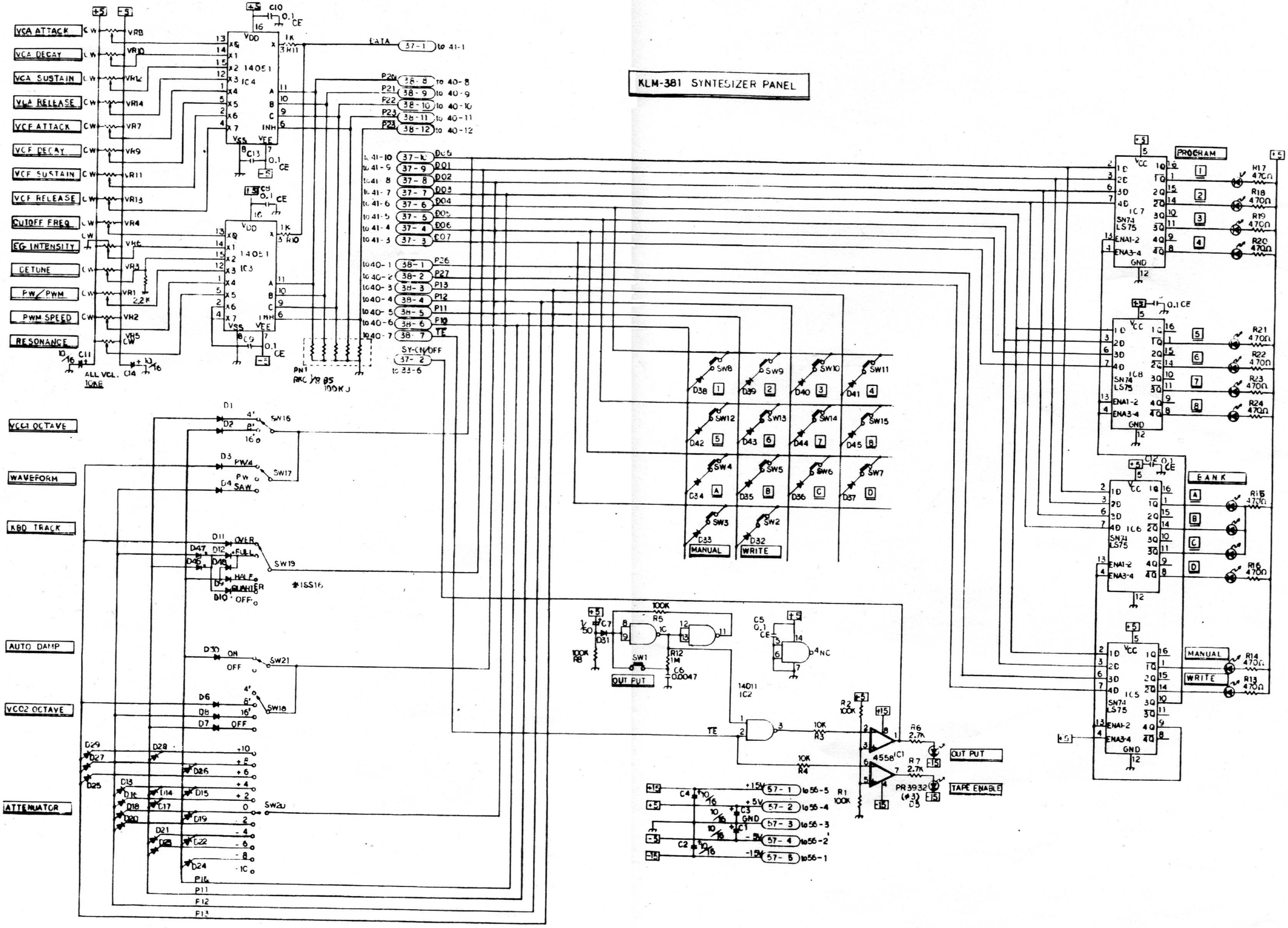




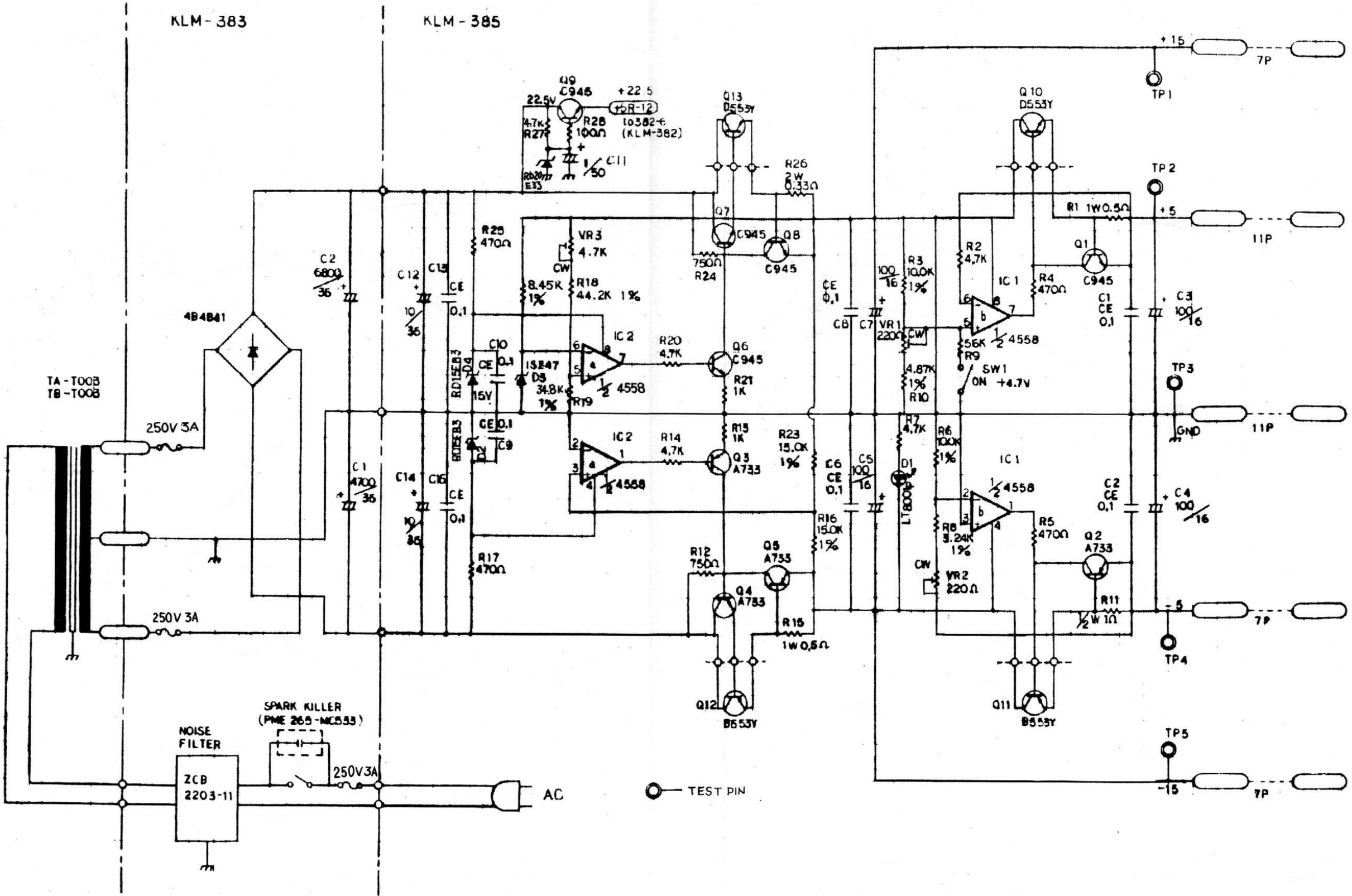
KLM-380 PROGRAMMER (402)



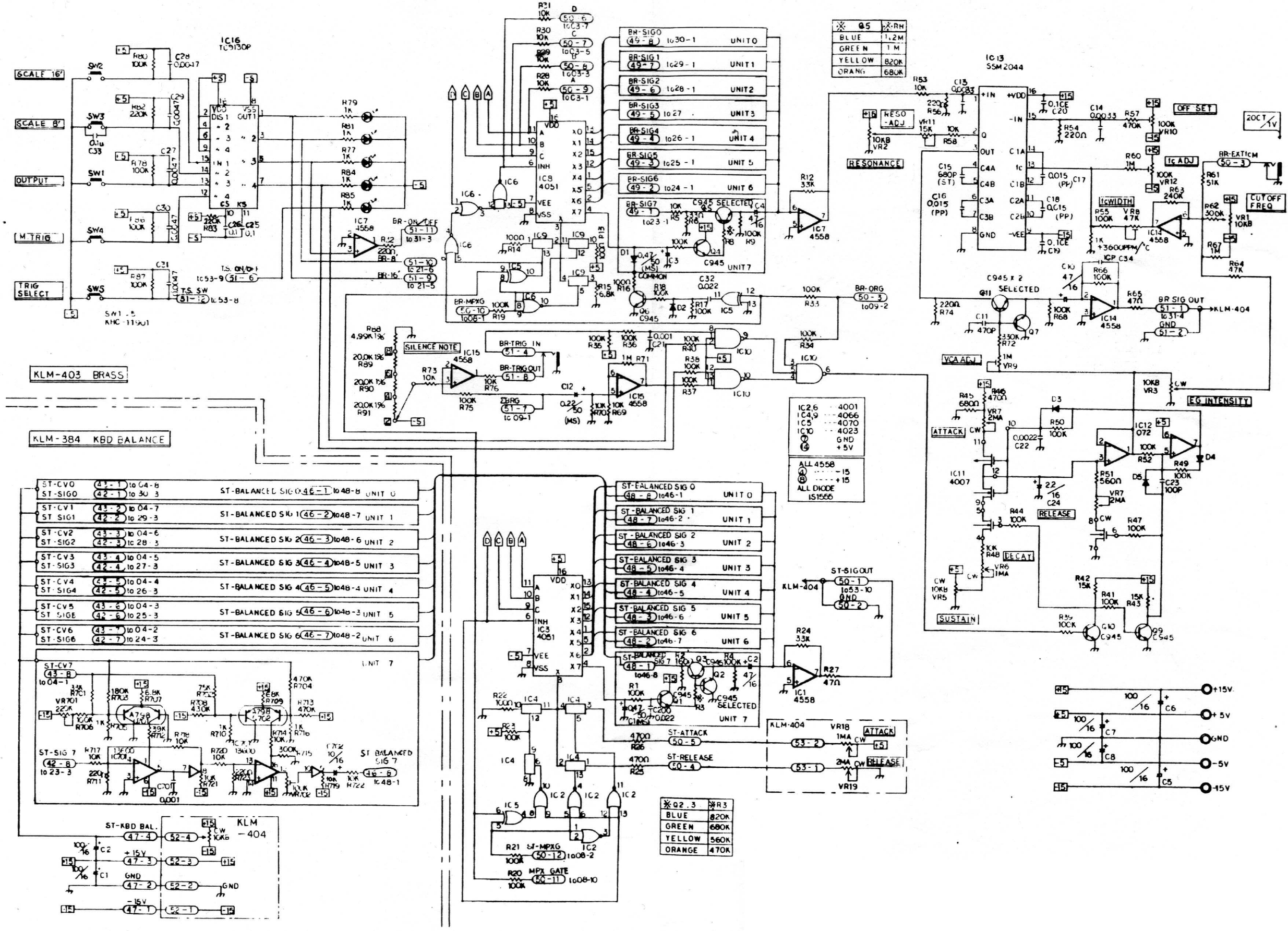
KLM-381 SYNTHESIZER PANEL



KLM-383, 385


KLM - 383
KLM - 385
TA - T00B
TB - T00B
4B4B41
250V 3A
250V 3A
250V 3A
NOISE FILTER
ZCB 2203-11
SPARK KILLER (PME 265 - MC533)
AC
TEST PIN
Q9 C945
22.5V
+22.5
+5R-12
R28 100Ω
10382-6 (KLM-382)
C11 1/50
R27 4.7K
Q13 D553Y
R26 2W 0.33Ω
Q7
C945
Q8
C945
750Ω R24
R25 470Ω
VR3 4.7K CW
8.45K 1%
R18 44.2K 1%
C2 6800/36
C12 10/36
C13 CE 0.1
C10 CE 0.1
ISE47 D9
34.8K 1%
R19
IC 2
1/2 4558
R20 4.7K
Q6 C945
R21 1K
C9 CE 0.1
RD15EB3
15V
R15 1K
R23 15.0K 1%
IC 2
R14 4.7K
Q3 A733
1/2 4558
C1 4700/35
C14 10/35
C16 CE 0.1
R17 470Ω
R12 750Ω
Q5 A733
Q4 A733
R16 15.0K 1%
R15 1W 0.5Ω
Q12 B553Y
C6 CE 0.1
C5 100/16
D1 LT800P
R7 4.7K
R6 100K 1%
IC 1
1/2 4558
R8 3.24K 1%
CW VR2 220Ω
R5 470Ω
Q2 A733
C2 CE 0.1
C4 100/16
R11 1/2W 1Ω
Q11 B553Y
C8 CE 0.1
C7 100/16
VR1 220Ω CW
4.87K 1% R10
R3 10.0K 1%
IC 1
R2 4.7K
R4 470Ω
56K R9
SW1 ON +4.7V
Q1 C945
R1 1W 0.5Ω
C1 CE 0.1
C3 100/16
+15
7P
TP1
TP2
+5
11P
TP3
GND
11P
-5
7P
TP4
TP5
-15
7P

KLM-384, 403



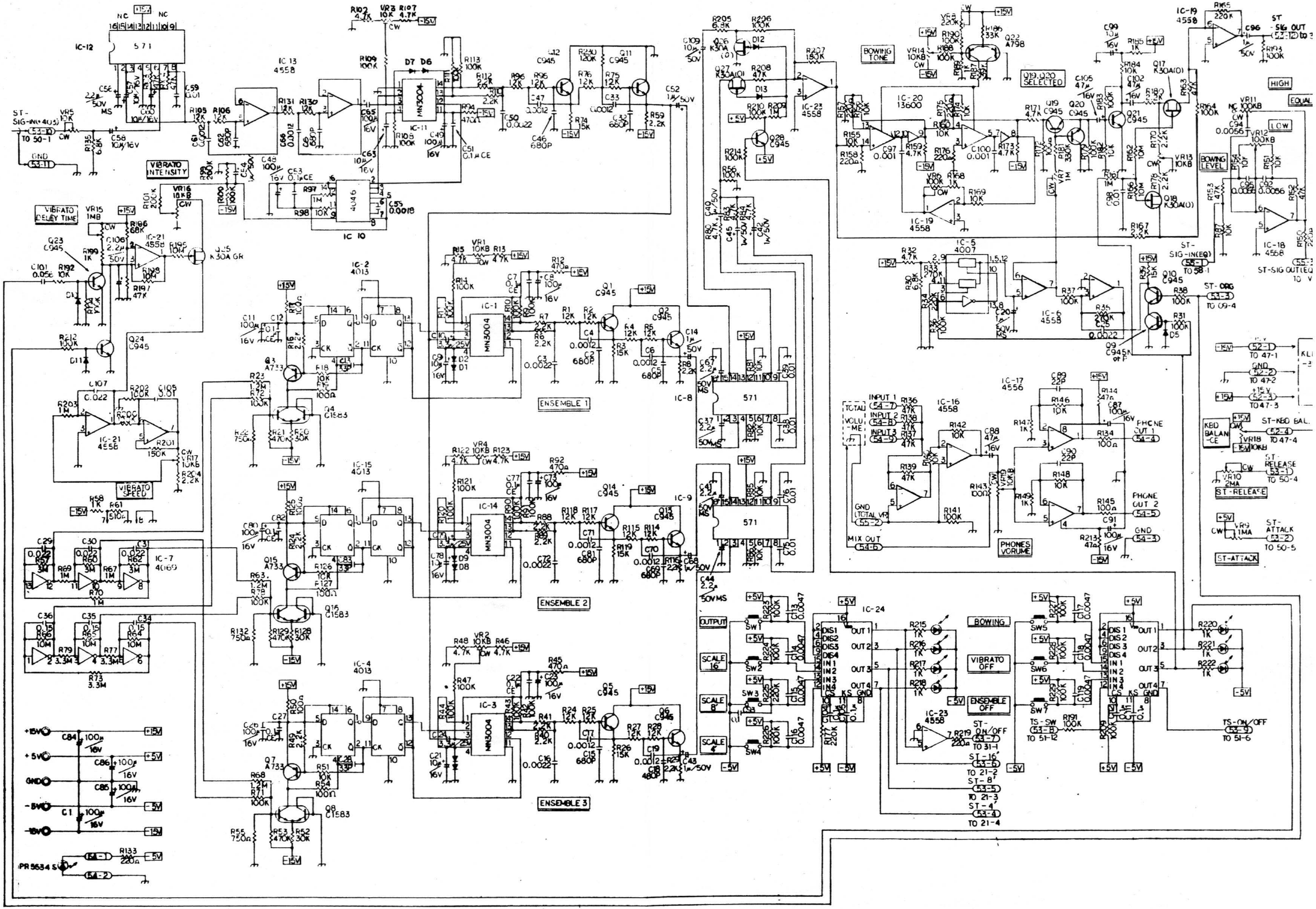
※ Q5	※RH
BLUE	1.2M
GREEN	1M
YELLOW	820K
ORANG	680K

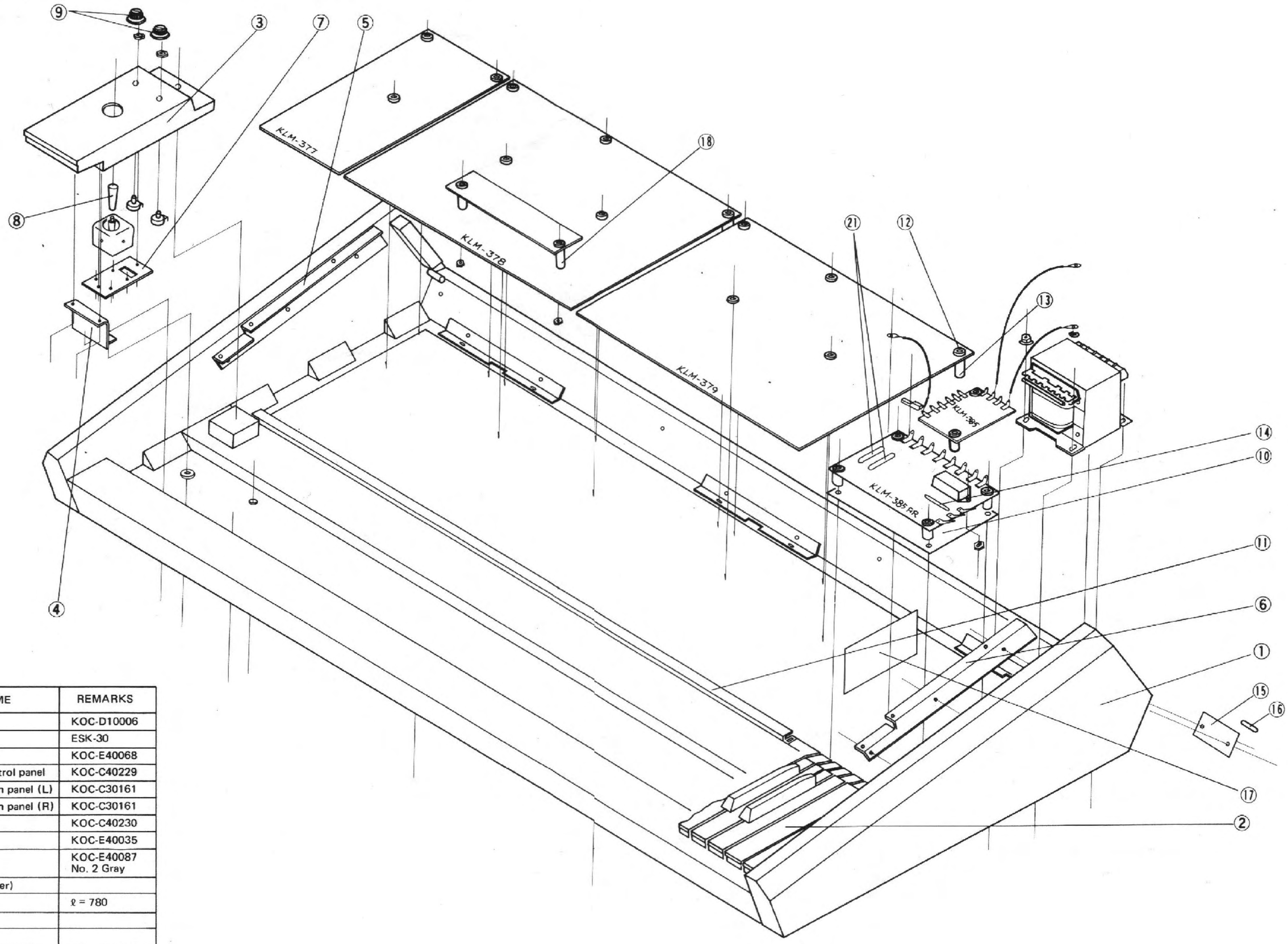
※Q2.3	※R3
BLUE	820K
GREEN	680K
YELLOW	560K
ORANGE	470K

IC2,6	4001
IC4,9	4066
IC5	4070
IC10	4023
⑦	GND
⑭	+5V

ALL 4558
④ ----- -15
⑧ ----- +15
ALL DIODE 1S1555

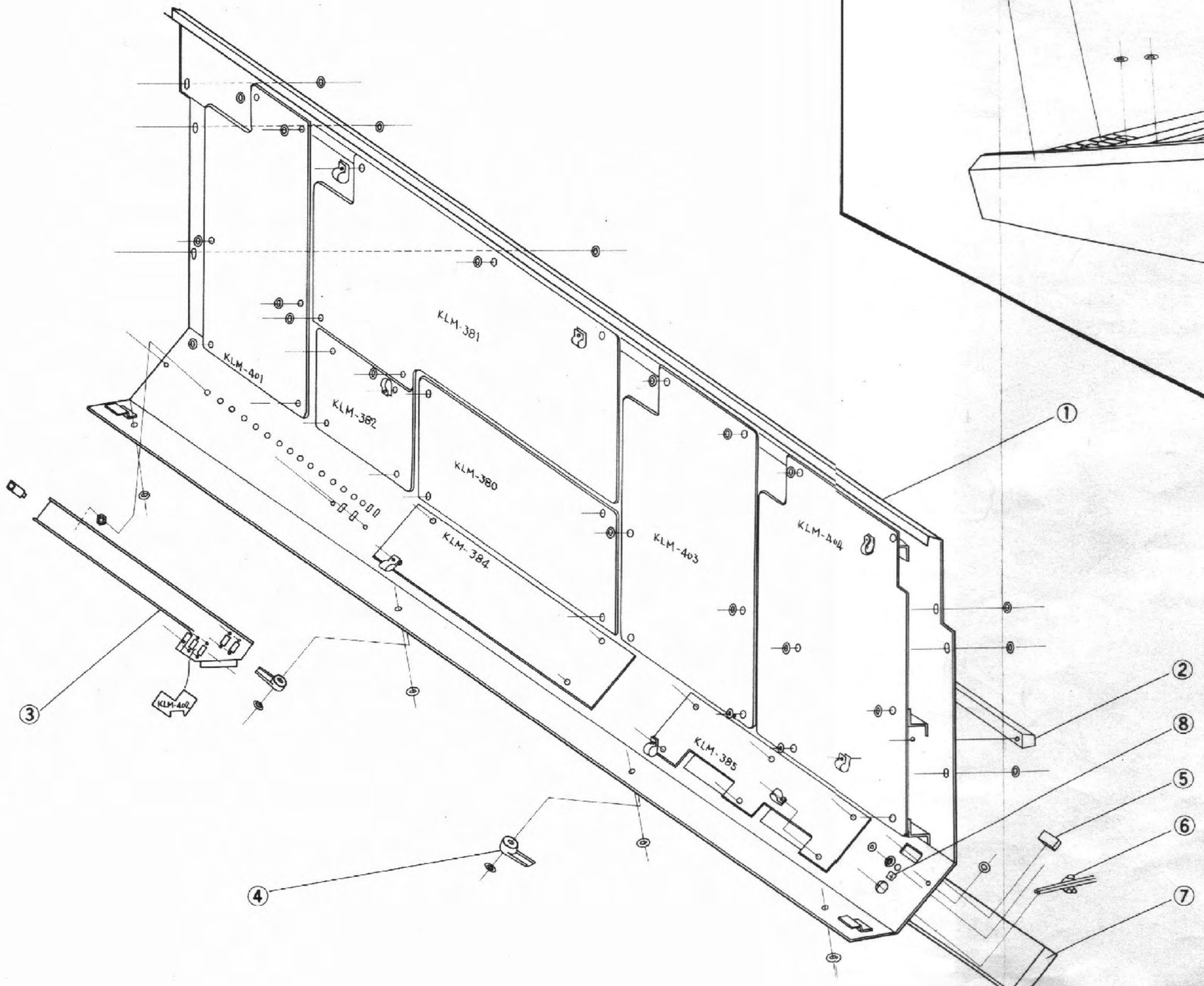
KLM-404

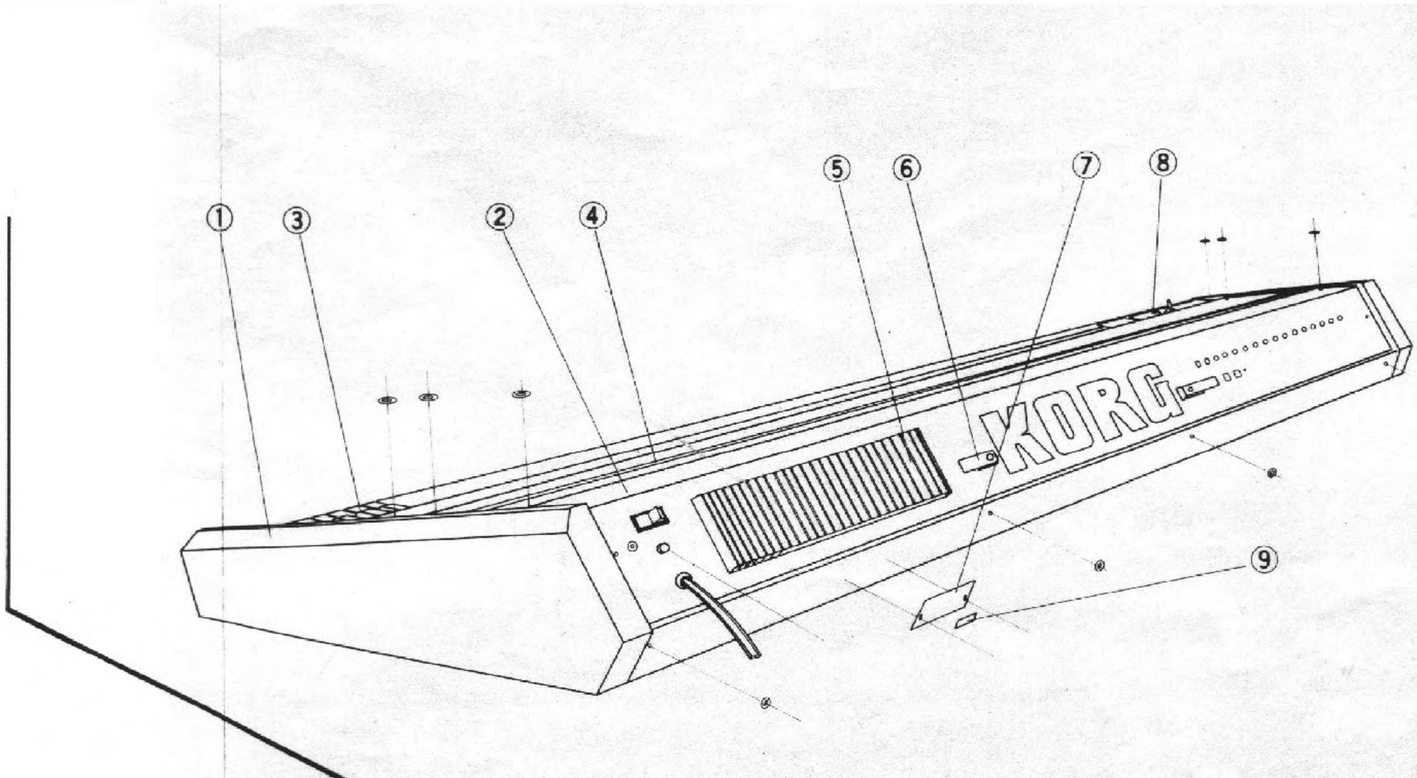

IC-12
S71
IC-13
4558
IC-11
MN3004
IC-10
4046
VIBRATO INTENSITY
VIBRATO DELEY TIME
VIBRATO SPEED
IC-21
4558
IC-2
4013
IC-1
MN3004
IC-15
4013
IC-14
MN3004
IC-4
4013
IC-3
MN3004
IC-7
4069
ENSEMBLE 1
ENSEMBLE 2
ENSEMBLE 3
IC-8
571
IC-9
571
IC-23
4558
IC-20
13600
IC-19
4558
IC-18
4558
IC-5
4007
IC-6
4558
IC-17
4556
IC-16
4558
IC-24
BOWING TONE
Q19,Q20 SELECTED
HIGH
EQUAL
LOW
BOWING LEVEL
VIBRATO OFF
ENSEMBLE OFF
OUTPUT
SCALE 16'
SCALE 8'
SCALE 4'
KBD BALAN -CE
ST-RELEASE
ST-ATTACK
PHONES VORUME
PHONE OUT 1
PHONE OUT 2
MIX OUT
TOTAL VOLU -ME
INPUT 1
INPUT 2
INPUT 3
ST-SIG-IN(405)
ST-SIG-IN(EQ)
ST-SIG OUT(EQ)
ST-ORG
TS-ON/OFF
TS-SW
+15V
-15V
+5V
-5V
GND



PART NO.	PARTS NAME	REMARKS
1	Wooden case	KOC-D10006
2	Key board	ESK-30
3	Control panel	KOC-E40068
4	Metal fitting of control panel	KOC-C40229
5	Metal fitting of main panel (L)	KOC-C30161
6	Metal fitting of main panel (R)	KOC-C30161
7	Joystic plate	KOC-C40230
8	Joystic VR knob	KOC-E40035
9	Rotary VR knob	KOC-E40087 No. 2 Gray
10	Shielding sheet (Fiber)	
11	PC board rail	ℓ = 780
12	Bushing (TB300)	
13	Bushing (TB301)	
14	Fuse seal	
15	Model number plate	KOC-C40144
16	Serial number seal	
17	Fuse caution seal	KOC-F30013
18	Bushing (TA320)	

2. STRUCTURAL DIAGRAM

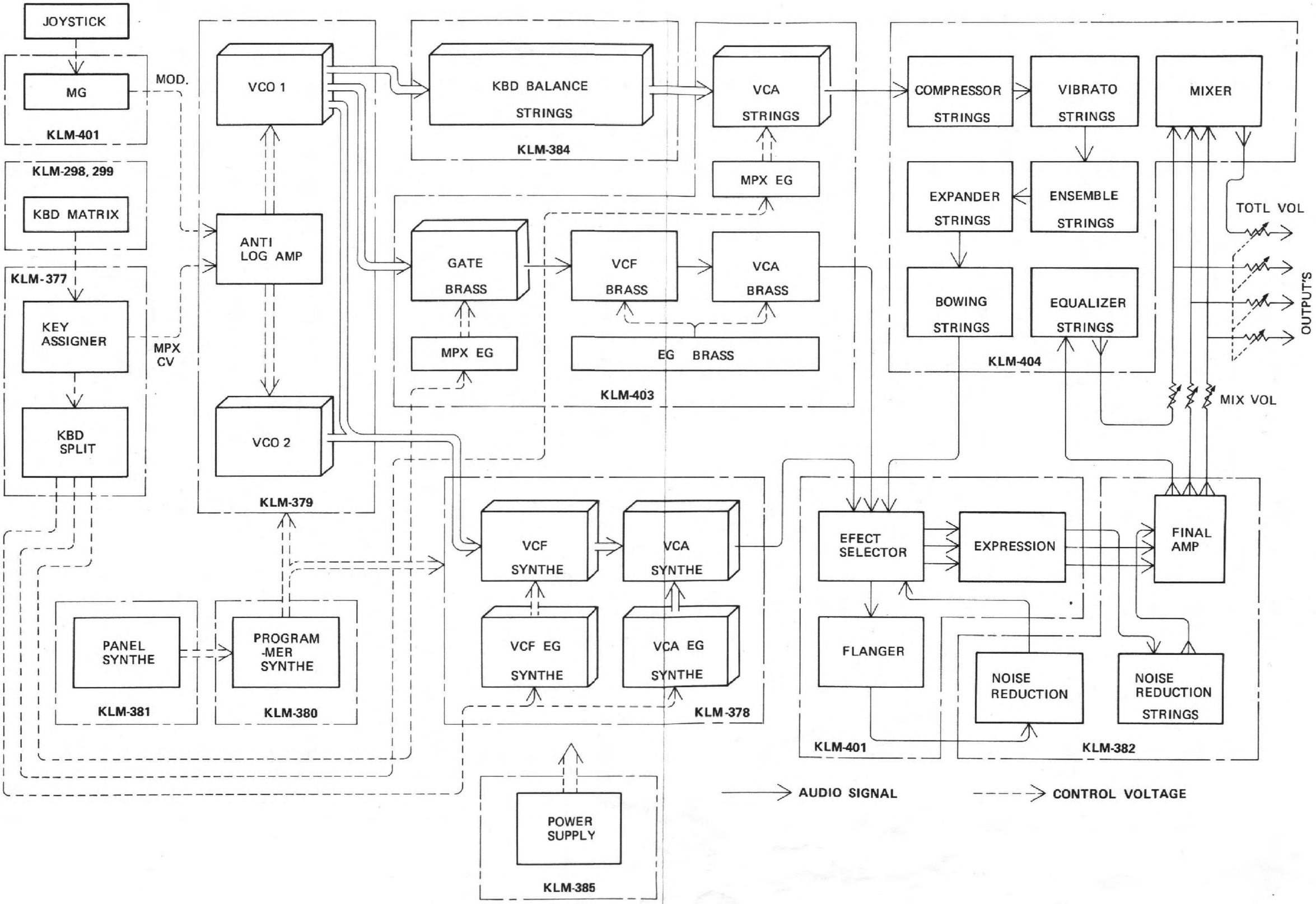




PART NO.	PARTS NAME	REMARKS
1	Wooden case	KOC-D10006
2	Main panel	KOC-C10004
3	Keyboard	ESK-30
4	Music stand	KOC-C30162
5	Radiator	KOC-C30189
6	Cord Stopper	KOC-E40099
7	Model number plate	KOC-C40144
8	Control panel	KOC-E40068
9	Serial number seal	KOC-F40050

PART NO.	PARTS NAME	REMARKS
1	Main panel	KOC-C10004
2	Music stand	KOC-C30162
3	Phone jack plate	KOC-C20113
4	Cord stopper	KOC-E40099
5	Power SW	
6	Bushing	
7	Radiator	KOC-C30189
8	GND seal	

3. BLOCK DIAGRAM



1. SPECIFICATIONS

KEYBOARD ..... • C–C, 61 Keys, 8 voices

SYNTHESIZER SECTION (Program and edit functions are possible for items marked *)

VCO-1* .....
- Octave (16', 8', 4')
- Waveform (⩘ , PW, PWM)
- PW/PWM Intensity
- PWM Speed

VCO-2* .....
- Scale (Off, 16', 8', 4')
- Waveform (⩘)
- Detune

VCF* .....
- Cut-off Frequency
- Resonance
- EG Intensity
- KBD Track (Off 0%, Quarter 25%, Half 50%, Full 100%, Over < 150%)

VCF EG* .....
- Attack
- Decay
- Sustain
- Release

VCA* ..... • Attenuator (–10dB ~ +10dB)

VCA EG* .....
- Attack
- Decay
- Sustain
- Release

VCA* ..... • Attenuator (–10dB ~ +10dB)

AUTO DAMP ..... • ON/OFF

PROGRAMMER (x32) .....
- Program Select (1–8)
- Bank Select (A, B, C, D)
- Manual
- Write

TAPE INTERFACE .....
- To Tape
- From Tape
- Verify
- Error/Cancel
- Write Enable (Enable/Disable)
- Tape Enable (Enable/Disable)
- Tape Indicator x2 (Found, Loading)

MIXER .....
- Output (On/Off)
- Volume

BRASS SECTION

OCTAVE (x2) ..... • 16', 8'

VCF .....
- Cut-off Frequency
- Resonance
- EG Intensity

ENVELOPE GENERATOR .....
- Attack
- Decay
- Sustain
- Release

TRIGGER .....
- Multiple Trigger (On/Off)
- Trigger Select (On/Off)
- Silence Note (2, 4, 6, 8)

MIXER .....
- Output (On/Off)
- Volume

STRINGS SECTION

OCTAVE (x3) ..... • 16', 8', 4'

ENVELOPE GENERATOR .....
- Attack
- Release

EQUALIZER .....
- High
- Low

EFFECT .....
- Bowing (On/Off, Level, Tone)
- Vibrato (On/Off, Delay Time, Intensity, Speed)
- Ensemble (On/Off)

FILTER ..... • KBD Balance

MIXER .....
- Output (On/Off)
- Volume

TOTAL CONTROL SECTION

KEY ASSIGNOR ..... • Assign Mode (1, 2)

KEYBOARD SPLIT .....
- Synthe (L, L+H, H)
- Brass (L, L+H, H)
- Strings (L, L+H, H)

PITCH CONTROL ..... • Tune (±100 Cents)

VIBRATO .....
- Delay Vibrato (On/Off)
- Intensity

JOY STICK .....
- Pitch Bend (X-Axis)
- Vibrato Depth/Trill Depth (Y-Axis)
- Intensity
- Speed

FLANGER .....
- Select (Synthe, Brass, Strings)
- Manual
- Intensity
- Feedback
- Speed

VOLUME CONTROL .....
- Total Volume
- Headphone Volume

POWER SWITCH ..... • Power (On/Off)

INPUTS & OUTPUTS

INPUTS .....
- Synthe VCF fcM In (–5V ~ +5V)
- Synthe Release (⊓GND)
- Brass VCF fcM In (–5V ~ +5V)
- Brass Trigger In (⊓GND)
- Separate Expression x3 (0 ~ +5V)
- Total Expression (0 ~ +5V)
- From Tape (With High/Low Switch)

OUTPUTS .....
- Mix Outputs (High, Low)
- Separate Outputs (Synthe, Brass, Strings)
- Headphone Output (Stereo)
- To Tape (With High/Low Switch)

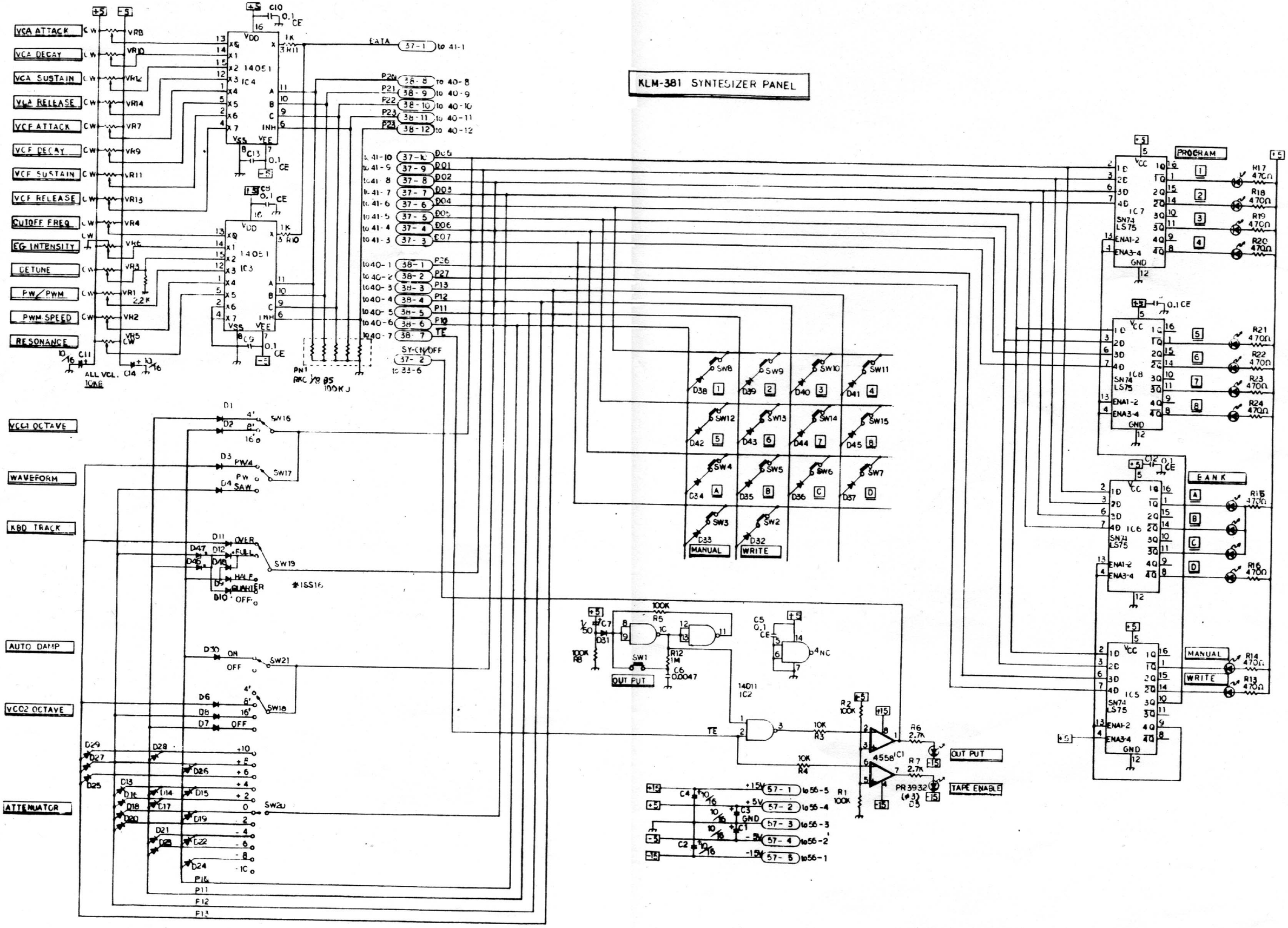
DIMENSIONS ..... • 1012(W) x 542(D) x 173(H) mm

WEIGHT ..... • 23.5 kg

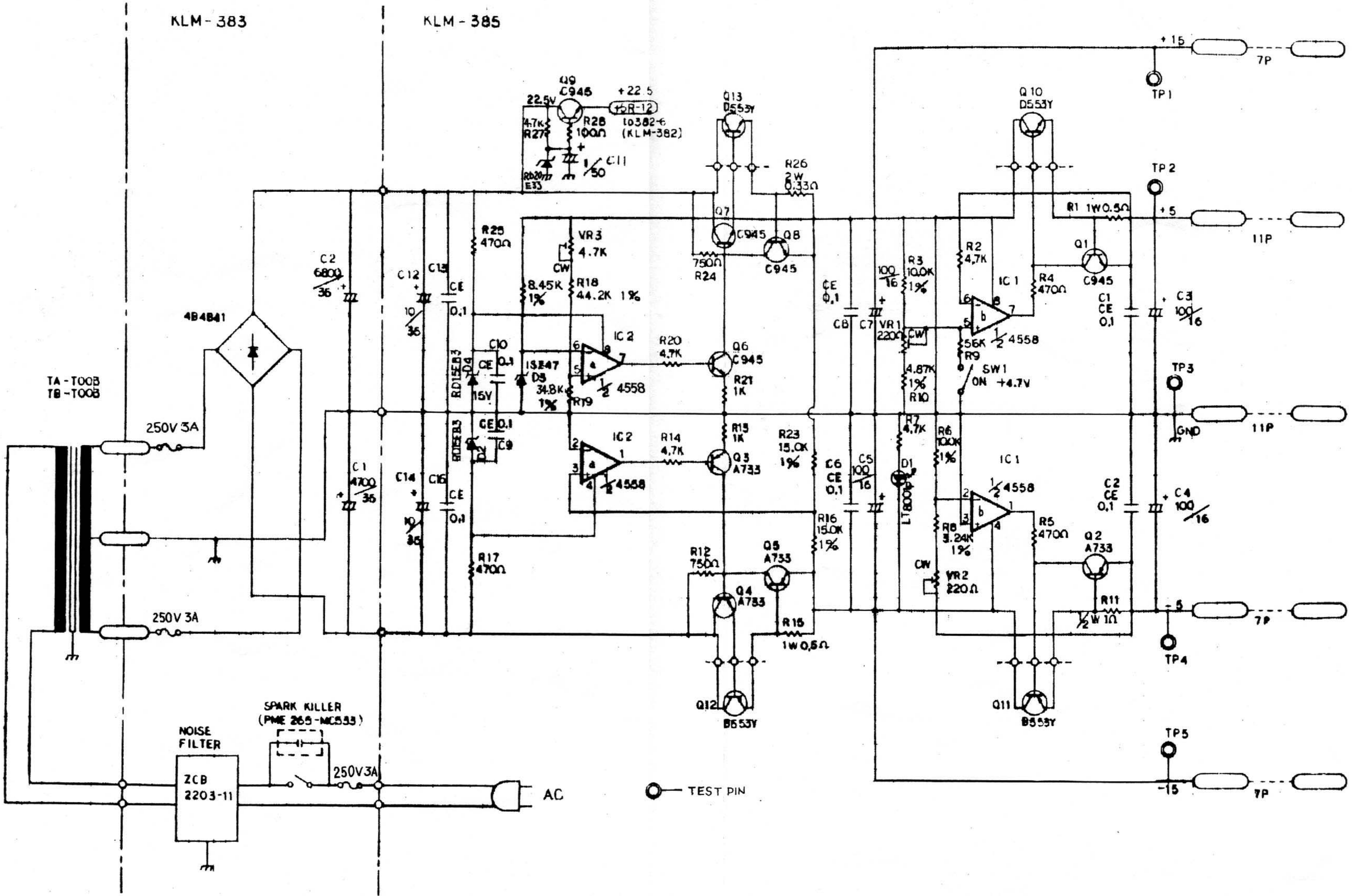
ACCESSORIES .....
- Connection Cord
- Dust Cover
- Foot Switch S-1
- Memory Cassette

POWER CONSUMPTION .....
- Voltage (Local Voltage, 50/60 Hz)
- Wattage (53 W)

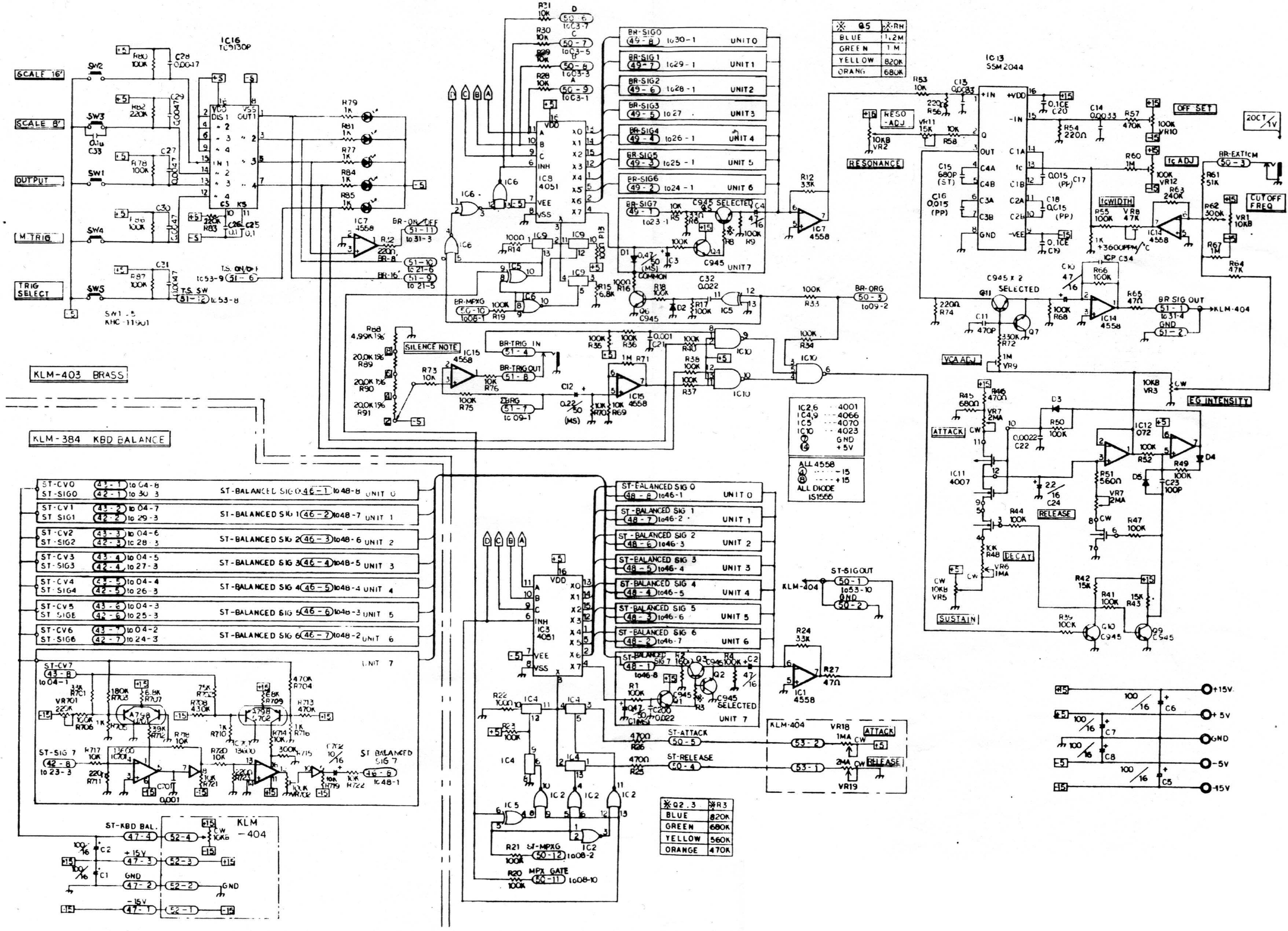
KLM-381 SYNTHESIZER PANEL



KLM-383, 385


KLM - 383
KLM - 385
TA - T00B
TB - T00B
4B4B41
250V 3A
250V 3A
250V 3A
NOISE FILTER
ZCB 2203-11
SPARK KILLER (PME 265 - MC533)
AC
TEST PIN
Q9 C945
22.5V
+22.5
+5R-12
R28 100Ω
10382-6 (KLM-382)
C11 1/50
R27 4.7K
Q13 D553Y
R26 2W 0.33Ω
Q7
C945
Q8
C945
750Ω R24
R25 470Ω
VR3 4.7K CW
8.45K 1%
R18 44.2K 1%
C2 6800/36
C12 10/36
C13 CE 0.1
C10 CE 0.1
ISE47 D9
34.8K 1%
R19
IC 2
1/2 4558
R20 4.7K
Q6 C945
R21 1K
C9 CE 0.1
RD15EB3
15V
R15 1K
R23 15.0K 1%
IC 2
R14 4.7K
Q3 A733
1/2 4558
C1 4700/35
C14 10/35
C16 CE 0.1
R17 470Ω
R12 750Ω
Q5 A733
Q4 A733
R16 15.0K 1%
R15 1W 0.5Ω
Q12 B553Y
C6 CE 0.1
C5 100/16
D1 LT800P
R7 4.7K
R6 100K 1%
IC 1
1/2 4558
R8 3.24K 1%
CW VR2 220Ω
R5 470Ω
Q2 A733
C2 CE 0.1
C4 100/16
R11 1/2W 1Ω
Q11 B553Y
C8 CE 0.1
C7 100/16
VR1 220Ω CW
4.87K 1% R10
R3 10.0K 1%
IC 1
R2 4.7K
R4 470Ω
56K R9
SW1 ON +4.7V
Q1 C945
R1 1W 0.5Ω
C1 CE 0.1
C3 100/16
+15
7P
TP1
TP2
+5
11P
TP3
GND
11P
-5
7P
TP4
TP5
-15
7P

KLM-384, 403



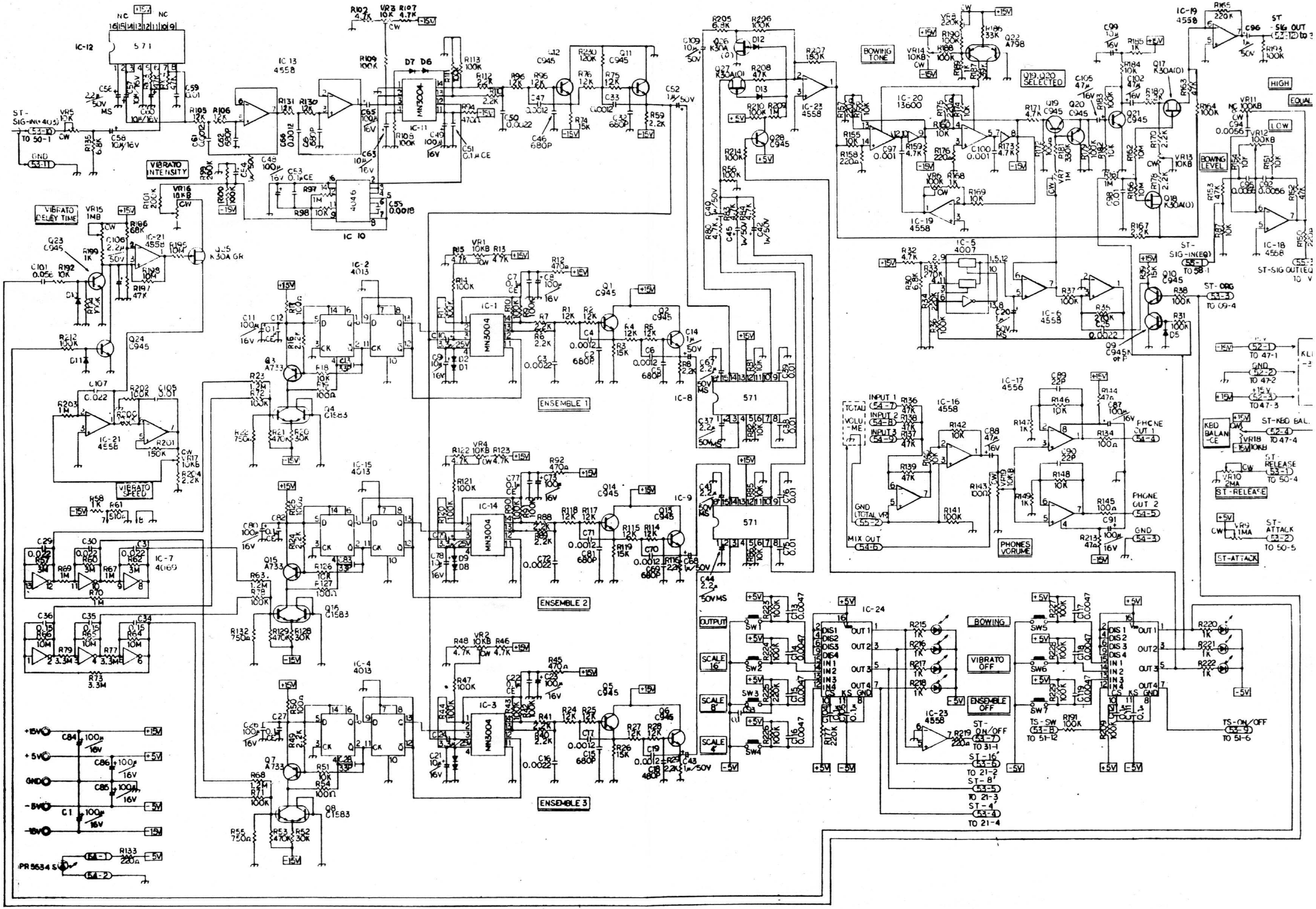
※ Q5	※RH
BLUE	1.2M
GREEN	1M
YELLOW	820K
ORANG	680K

※Q2.3	※R3
BLUE	820K
GREEN	680K
YELLOW	560K
ORANGE	470K

IC2,6	4001
IC4,9	4066
IC5	4070
IC10	4023
⑦	GND
⑭	+5V

ALL 4558
④ ----- -15
⑧ ----- +15
ALL DIODE 1S1555

KLM-404


IC-12
S71
IC-13
4558
IC-11
MN3004
IC-10
4046
VIBRATO INTENSITY
VIBRATO DELEY TIME
VIBRATO SPEED
IC-21
4558
IC-2
4013
IC-1
MN3004
IC-15
4013
IC-14
MN3004
IC-4
4013
IC-3
MN3004
IC-7
4069
ENSEMBLE 1
ENSEMBLE 2
ENSEMBLE 3
IC-8
571
IC-9
571
IC-23
4558
IC-20
13600
IC-19
4558
IC-18
4558
IC-5
4007
IC-6
4558
IC-17
4556
IC-16
4558
IC-24
BOWING TONE
Q19,Q20 SELECTED
HIGH
EQUAL
LOW
BOWING LEVEL
VIBRATO OFF
ENSEMBLE OFF
OUTPUT
SCALE 16'
SCALE 8'
SCALE 4'
KBD BALAN -CE
ST-RELEASE
ST-ATTACK
PHONES VORUME
PHONE OUT 1
PHONE OUT 2
MIX OUT
TOTAL VOLU -ME
INPUT 1
INPUT 2
INPUT 3
ST-SIG-IN(405)
ST-SIG-IN(EQ)
ST-SIG OUT(EQ)
ST-ORG
TS-ON/OFF
TS-SW
+15V
-15V
+5V
-5V
GND